

(a) generating a gene expression profile of a plurality of gene-expression indicating polynucleotides including for each of the polynucleotides:

(i) a first value for a first polynucleotide characteristic,

(ii) a second value for a second polynucleotide-characteristic different from said first characteristic, and

(iii) a third value that is a measure of the quantity of the polynucleotide;

(b) calculating for each polynucleotide from the first[,] and second values a position, and from the third [values,] value [a position and] a peak at that position in a multi-dimensional display space; and

(c) displaying the peak for each polynucleotide at the calculated position for the polynucleotide in the display[:], the resulting display representing thereby a molecular topography of gene expression.

8. (Amended) [The] A method [of claim 7.] in a computer system for analyzing and displaying data on gene expression in a molecular topography, comprising:

(a) generating a gene expression profile of a plurality of gene-expression indicating polynucleotides including for each of the polynucleotides:

(i) a first value for a first polynucleotide characteristic,

(ii) a second value for a second polynucleotide-characteristic different from said first characteristic, and

(iii) a third value that is a measure of the quantity of the polynucleotide;

(b) calculating for each polynucleotide from the first, second, and third values, a position and a peak in a multi-dimensional display space; and

(c) displaying the peak for each polynucleotide at the calculated position for the polynucleotide in the display, the resulting display representing thereby a molecular topography of gene expression,

wherein the polynucleotides are 3'-end fragments of restriction enzyme cleaved cDNAs;

wherein the first characteristic is a sequence identifier, and the second characteristic is a measure of size; and

wherein the sequence identifier is the combination of an anchor sequence of a cDNA synthesis primer and a restriction enzyme cleavage reaction specificity.

Claim 23:

Line 1, delete "23" and insert --22--.

Please add the following new claim 24:

--24. A computer program product, usable in a computer system, for analyzing and displaying gene expression in a molecular topography, the computer program product comprising:

a first program code that generates a gene expression profile of a plurality of gene-expression indicating polynucleotides including for each of the polynucleotides:

(i) a first value for a first polynucleotide characteristic,
(ii) a second value for a second polynucleotide- characteristic different from said first characteristic, and

(iii) a third value that is a measure of the quantity of the polynucleotide;

a second program code that calculates for each polynucleotide from the first and second values a position, and from the third value a peak at that position in a multi-dimensional display space; and

a third program code that displays the peak for each polynucleotide at the calculated position for the polynucleotide in a display, the resulting display representing thereby a molecular topography of gene expression.--